

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE INSTALLATION OF A NEW TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 27 AND SNOWDEN FARM PKWY. (A-305) IN MONTGOMERY COUNTY. MD 27 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA FOUR-PHASE, SEMI-ACTUATED MODE WITH AN EXCLUSIVE LEFT TURN PHASE FOR NORTHBOUND MD 27. A CONCURRENT PEDESTRIAN PHASE ACROSS THE WEST LEG AND AN ALTERNATE PEDESTRIAN PHASE ACROSS THE SOUTH LEG OF THE INTERSECTION WILL BE PROVIDED.

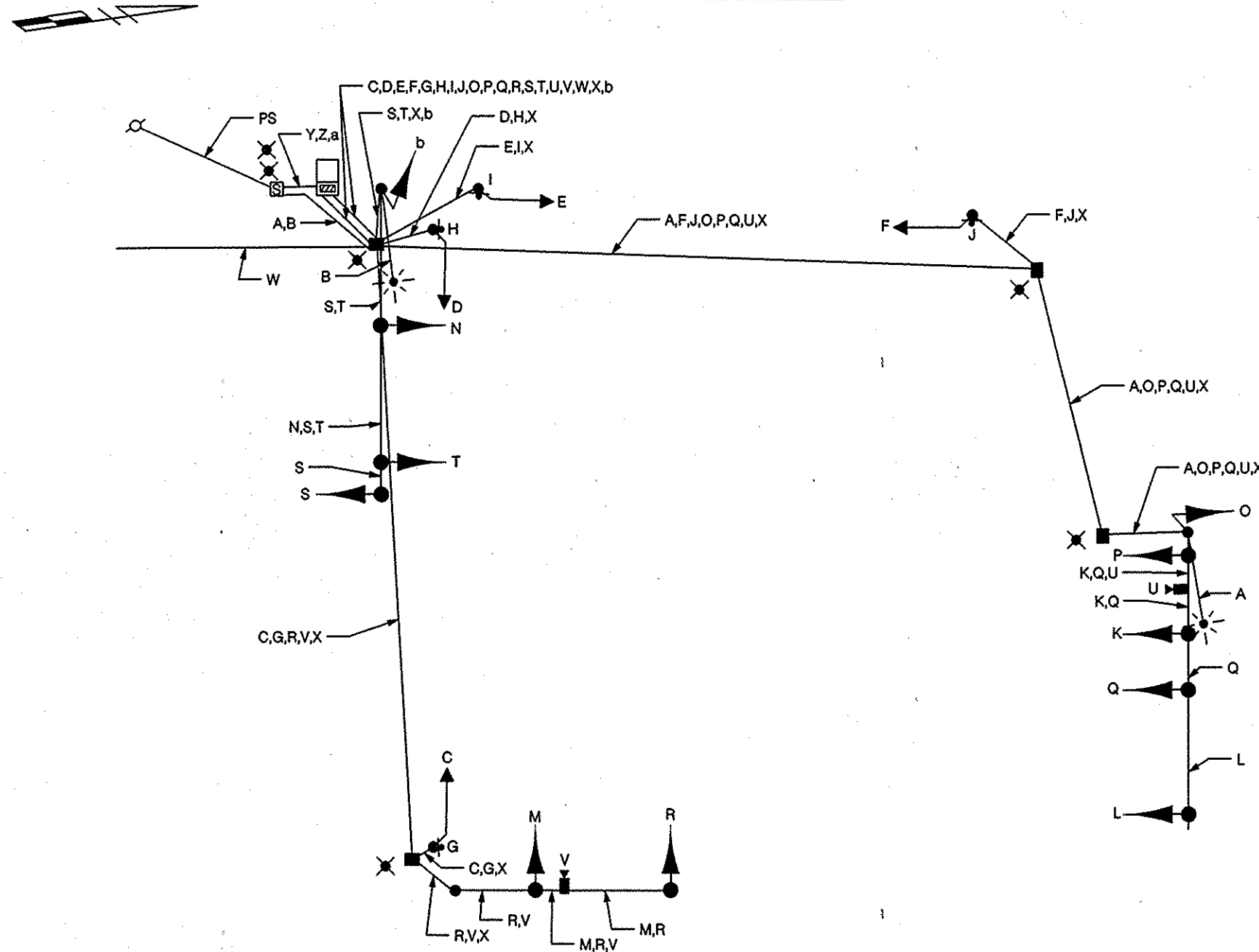
CONTROLLER REQUIREMENTS

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH SYSTEM PACKAGE AND VIDEO DETECTION INTERFACE EQUIPMENT HOUSED IN A NEMA "6" BASE MOUNTED CABINET.

SPECIAL NOTE

UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF THE MSHA AT (410) 787-7635 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR MUST PROVIDE MR. SNYDER WITH THE NEAREST ADDRESS, ZIP CODE, AND PHONE NUMBER.

WIRING DIAGRAM



WIRING KEY

A-B	2-CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G.) TRAY CABLE
C-F	3-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
G-N	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
O-T	7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
U-V	VIDEO DETECTION CABLE
W	12-PAIR VOICE GRADE INTERCONNECT CABLE
X	STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
Y-a	1-CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)
b	7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
PS	PROPOSED ELECTRIC SERVICE
X	GROUND ROD

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE FURNISHED BY THE SHA AND INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
NONE		

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR. ALL EQUIPMENT SHALL HAVE CATALOG CUTS SUBMITTED TO THE OFFICE OF TRAFFIC AND SAFETY FOR APPROVAL PRIOR TO INSTALLATION.

QUANTITY	DESCRIPTION
LS	MAINTENANCE OF TRAFFIC
8 CY	TEST PIT EXCAVATION
110 LF	FURNISH AND INSTALL 24 IN. WHITE HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING
380 LF	FURNISH AND INSTALL 12 IN. WHITE HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING
2 EA	FURNISH AND INSTALL 300 FT. VIDEO DETECTION CABLE
33 EA	FURNISH AND INSTALL 12 IN. VEHICULAR SIGNAL HEAD SECTION
2 EA	FURNISH AND INSTALL 15 FT. STREET LIGHTING ARM
2 EA	FURNISH AND INSTALL 250 WATT HPSV LUMINAIRE
1 EA	FURNISH AND INSTALL 50 FT. MAST ARM AND POLE
2 EA	FURNISH AND INSTALL 60 FT. MAST ARM AND POLE
2 EA	FURNISH AND INSTALL VIDEO DETECTION CAMERA
1 EA	FURNISH AND INSTALL VIDEO INTERFACE EQUIPMENT
100 LF	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - TRENCHED
280 LF	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - SLOTTED
2300 LF	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - TRENCHED
19 CY	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
75 LF	FURNISH AND INSTALL WOOD SIGN SUPPORTS (4 IN. X 6 IN.)
450 LF	FURNISH AND INSTALL NO. 6 AWG STRANDED BARE COPPER WIRE
30 LF	FURNISH AND INSTALL 2 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - TRENCHED
1 EA	FURNISH AND INSTALL METERED SERVICE PEDESTAL
75 LF	FURNISH AND INSTALL ELECTRICAL CABLE 1-CONDUCTOR (NO. 4 A.W.G.)
13 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
2600 LF	FURNISH AND INSTALL 12-PAIR COMMUNICATION CABLE - UNDERGROUND
6 EA	FURNISH AND INSTALL GROUND ROD 3/4 IN. DIAMETER X 10 FT. LENGTH
560 LF	FURNISH AND INSTALL ELECTRICAL CABLE 5-CONDUCTOR (NO. 14 A.W.G.)
1220 LF	FURNISH AND INSTALL ELECTRICAL CABLE 7-CONDUCTOR (NO. 14 A.W.G.)
360 LF	FURNISH AND INSTALL ELECTRICAL CABLE 2-CONDUCTOR (NO. 12 A.W.G.) - TRAY CABLE
420 LF	FURNISH AND INSTALL ELECTRICAL CABLE 3-CONDUCTOR (NO. 14 A.W.G.)
1 EA	FURNISH AND INSTALL BASE MOUNTED CABINET AND CONTROLLER
2 EA	FURNISH AND INSTALL D3-2 DUAL FACE SIGN (VAR. X 16") - MAST ARM MOUNT
1 EA	FURNISH AND INSTALL R3-6(L) SIGN (30" X 36") - MAST ARM MOUNT
1 EA	FURNISH AND INSTALL R3-4 SIGN (24" X 24") - MAST ARM MOUNT
1 EA	FURNISH AND INSTALL M95-1 SIGN (72" X 24") - MAST ARM MOUNT
2 EA	FURNISH AND INSTALL W3-3 SIGN (48" X 48") WITH "NEW" PANEL (30" X 30") - GROUND MOUNT
4 EA	FURNISH AND INSTALL BREAKAWAY PEDESTAL POLE
4 EA	FURNISH AND INSTALL 16 IN. COUNTDOWN PEDESTRIAN SIGNAL
4 EA	FURNISH AND INSTALL AUDIBLE-TACTILE PEDESTRIAN PUSHBUTTON AND SIGN
1 EA	FURNISH AND INSTALL 2 WIRE CENTRAL CONTROL UNIT
1 EA	CUT, CLEAN, GALVANIZE AND CAP MAST ARM

EQUIPMENT LIST "C"

C. EXISTING EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION, 7491 CONNELLEY DRIVE, HANOVER, MARYLAND 21076. THE CONTRACTOR SHALL NOTIFY THE SHA AT (410) 787-7652 AT LEAST THREE DAYS IN ADVANCE OF DELIVERY.

ITEM NO.	QUANTITY	DESCRIPTION
NONE		

ALL SIGNAL EQUIPMENT TO BE REMOVED AND NOT RETURNED TO THE SHA SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
PHASE 1 & 6	←G→	←G→	←G→	G	G	R	R	R	R	R	R	DW	DW	DW	DW
1 & 6 CHANGE	←Y→	←Y→	←Y→	Y	Y	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 2 & 6	←R→	←R→	←R→	G	G	G	G	G	R	R	R	WK	WK	DW	DW
PED CLEAR	←R→	←R→	←R→	G	G	G	G	G	R	R	R	FL-DW	FL-DW	DW	DW
2 & 6 CHANGE	←R→	←R→	←R→	Y	Y	Y	Y	Y	R	R	R	DW	DW	DW	DW
PHASE 4	←R→	←R→	←R→	R	R	R	R	R	G	G	G	DW	DW	DW	DW
4 CHANGE	←R→	←R→	←R→	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW
PHASE 4 ALT	←R→	←R→	←R→	R	R	R	R	R	G	G	G	DW	DW	WK	WK
PED CLEAR	←R→	←R→	←R→	R	R	R	R	R	G	G	G	DW	DW	FL-DW	FL-DW
4 ALT CHANGE	←R→	←R→	←R→	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW
FLASHING OPERATION	←FLR→	←FLR→	←FLR→	FLY	FLY	FLY	FLY	FLY	FLR	FLR	FLR	DARK	DARK	DARK	DARK

CONTACT PERSONS FOR DISTRICT 3 ARE AS FOLLOWS:

MR. JEFF WENTZ
ASSISTANT DISTRICT ENGINEER - TRAFFIC
(301) 513-7318

MR. WAYNE MOWDY
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
(301) 513-7304

MR. AUGIE REBISH
ASSISTANT DISTRICT ENGINEER - UTILITIES
(301) 513-7350

CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY

MR. RICHARD DAFF, SR.
CHIEF, TRAFFIC OPERATIONS
(410) 787-7630

MR. EUGENE BAILEY
TEAM LEADER SIGN OPERATIONS
(410) 787-7676

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF,
TRAFFIC OPERATIONS
(410) 787-7631

MS. DARLENE EIDE
SUPPLY OFFICE
SIGNAL SHOP WAREHOUSE
(410) 787-7668

MR. ED RODENHIZER
TEAM LEADER SIGNAL OPERATIONS
(410) 787-7652

CONTACTS FOR MONTGOMERY COUNTY

MR. KAMAL HAMAD
TRAFFIC ENGINEERING
(240) 777-8761

TRAFFIC CONCEPTS INC.
325 Gambrills Road
Suite E
Gambrills, MD 21054
(410) 923-7101
FAX (410) 923-6473
EMAIL TRAFFIC.CONCEPTS@COMCAST.NET



STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

GENERAL INFORMATION PLAN

MD 27 AND SNOWDEN FARM PKWY. (A-305)

SCALE	NONE	DATE	4-13-07	CONTRACT NO.	BW 996M82
DESIGNED BY	T. ZAYDEL	COUNTY	MONTGOMERY		
DRAWN BY	T. ZAYDEL	LOGMILE	15002700.44		
CHECKED BY	K. SCHMID	T.I.M.S. NO.	1242		
F.A.P. NO.	NA	TOD NO.			
DRAWING NO.	TS- 4564 GI	SHEET NO.	2	OF	8